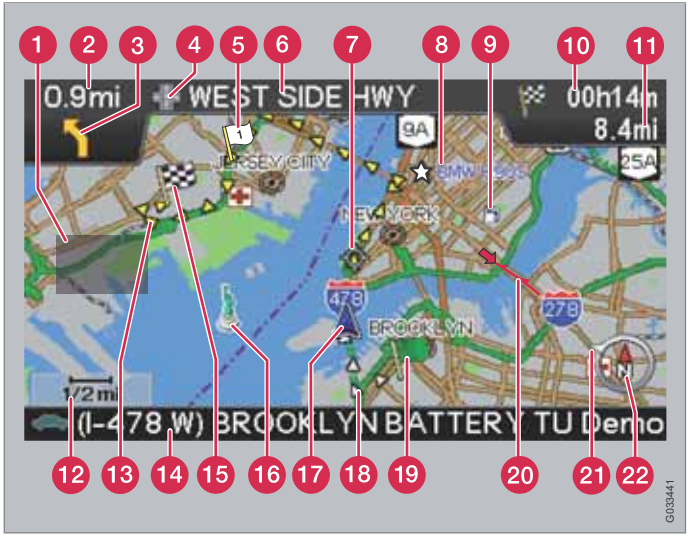
VOLVO C30, C70 & XC90

# VOLVO NAVIGATION SYSTEM (VNS)

Web Edition

OPERATING MANUAL




| Types of roads | Color |
|---|---|
| Freeways | Green |
| Main roads | Red |
| Secondary main roads | Brown |
| Normal roads | Dark gray |
| Local roads | Dark green |

**Text and symbols on the screen**

1. Area to be avoided
2. Distance to the next guidance point
3. Direction to take at next guidance point
4. Type of junction
5. Intermediate destination
6. Name of next street or road
7. Next guidance point
8. Stored location
9. Symbol for a Point of Interest – POI (Gas station)
10. Remaining time to destination
11. Remaining distance to destination
12. Map scale
13. Route
14. Current road
15. Final destination
16. Famous landmarks
17. The vehicle's current location
18. Completed section of the route
19. Starting point
20. Traffic information
21. Outer ring of compass – direction to destination
22. Compass

# VOLVO NAVIGATION SYSTEM (VNS) WITH RTT

VNS is a navigation system developed by Volvo, which is designed to help guide you to the destination of your choice and provide information along the way.

RTT[1] (Real Time Traffic) is an information system developed by Volvo, which can detect roads/streets with traffic disruptions and make it possible to select an alternative route past the problem area.

The system includes features that enable you to set itineraries, search for certain types of points of interest along your route, store special destinations, obtain traffic informaton en route, etc.

The system indicates the vehicle's current location, and shows part or all of the route to your destination, depending on the settings you have made. If at any time you should decide to deviate from the route originally set by the system, a new route to the destination will automatically be calculated.

By enabling you to reach your destination quickly and by the most direct route, Volvo's navigation system also helps contribute to improving the environment.

**NAVTEQ DATABASE End-User License Agreement**

See the information on page see page 82.

[1] Option. Not available in all markets.

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# 01

## GETTING TO KNOW THE NAVIGATION SYSTEM

# This manual

## Using this manual

The manual is divided into chapters describing the various features and functions of the navigation system.

A section dealing with common questions and answers, and an index, can be found at the end of the manual.

### Menu selections/Paths

Menu selections are shown in gray text in this manual, for example:

**Set destination ➔ Address ➔ City**

## Changes in the manual

The specifications, design features, and illustrations in this manual are not binding. We reserve the right to make modifications without prior notice.

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## Introduction

The VNS system can be used even if a destination has not been selected.

The vehicle's current route will be shown on the screen and the vehicle's position will be indicated by a blue arrow on the map.

The system's contents may vary from state to state, and not all menu selections may be available for technical reasons.

## Start up

The system starts up by displaying text on the screen that must be confirmed by pressing **ENTER** after you have selected to use either **Easy mode** or **Advanced mode**.

## Map mode

When the system has started, the screen will display the main menu briefly before entering Map mode. A map of the vehicle's current location will then be displayed.

- Press **BACK** to display the main menu.
- Press **ENTER** to activate the shortcut menu.
- Press the **navigation control** to activate Map scroll mode, for example to see parts of the map that are outside of the screen area.

Pressing **ENTER** in this mode activates the Map scroll menu, see page 32.

## On/Off

### ON

The ignition must be in position **I** or **II** in order to operate the system (refer to the vehicle's owner's manual).

- Press **ENTER** or **BACK**.

The screen will slide up from the dashboard automatically. It may take several seconds for the system to determine the vehicle's location and direction.

### Off

1. Use the **navigation control** to go to **Shut down**.
2. Press **ENTER** (press **BACK** to go to the main menu before shutting down).

The screen will retract automatically into the dashboard.

**NOTE**

The system can be used even if the engine is not running. It should be turned off when not in use to help avoid battery drain.

## Settings

The system is provided with default settings, but it will start with the settings that were most recently used.

If a setting is changed and you wish to return to the default setting, only the currently selected function will be affected.

There is no global reset function to return all settings to default.

## Before you start

### Easy/Advanced modes

When the navigation system is started, the desired user mode can be selected.

- **Easy**

Only the primary menus are available in this mode, and can be used to simply get directions from point A to B.

- **Advanced**

This mode makes all settings and functions available.

**Switching between modes**

Switching between modes can be done in **Settings**.

> **NOTE**
>
> Settings made in Easy mode are not used if the system is switched to Advanced mode, and vice versa. Settings are stored in the mode in which they were made.

### Demo (simulated guidance)

The navigation system contains a function that demonstrates guidance to a destination. However, please be aware that the demo can only be run when the vehicle is at a standstill.

This function is only available when VNS is in Advanced mode, see Demo on page 62.

## Contents of the main unit

All map information is stored on the main unit's hard drive. There is no DVD in the unit when it is delivered. The DVDs are used for any updates to system or map information, see the instructions of the DVD's cover.

New DVDs are issued on a regular basis with updated and new information. The latest DVDs can be purchased from a Volvo retailer.

Volvo cannot be responsible for the accuracy or completeness of data, maps, or routing guidance presented by your navigation system. Please contact the map developer, NavTeq at www.navteq.com.

**NOTE**

The main unit's DVD player is intended for Volvo DVDs only.

## Updating with a DVD

**NOTE**

Please note that an update may take up to 90 minutes. Be sure the vehicle's battery is adequately charged before beginning.

If a DVD contains new system software in addition to map information, the system will begin by running the software installation.

The vehicle can be driven while the navigation system is being updated, but VNS cannot be used while the update is in progress.

To perform an update:

1. Switch on the navigation system.
2. Remove a DVD if one is already inserted in the system's DVD player.
3. Insert the DVD containing the updated information. If there is more than one disc, insert them in the numbered order.
4. The system will now be automatically updated. Information will be displayed to show update progress.
5. After the update, the DVD containing the most recent update must remain in the system's DVD player. If more than one disc has been used, insert disc 1. If the disc is removed from the player, the navigation system will stop functioning.

If the system is switched off while an update is in progress, the update will be resumed the next time the system is switched on.

In certain cases, updating map information will add new system functions.

The VNS start screen will be displayed when updating is completed.

## DVD care

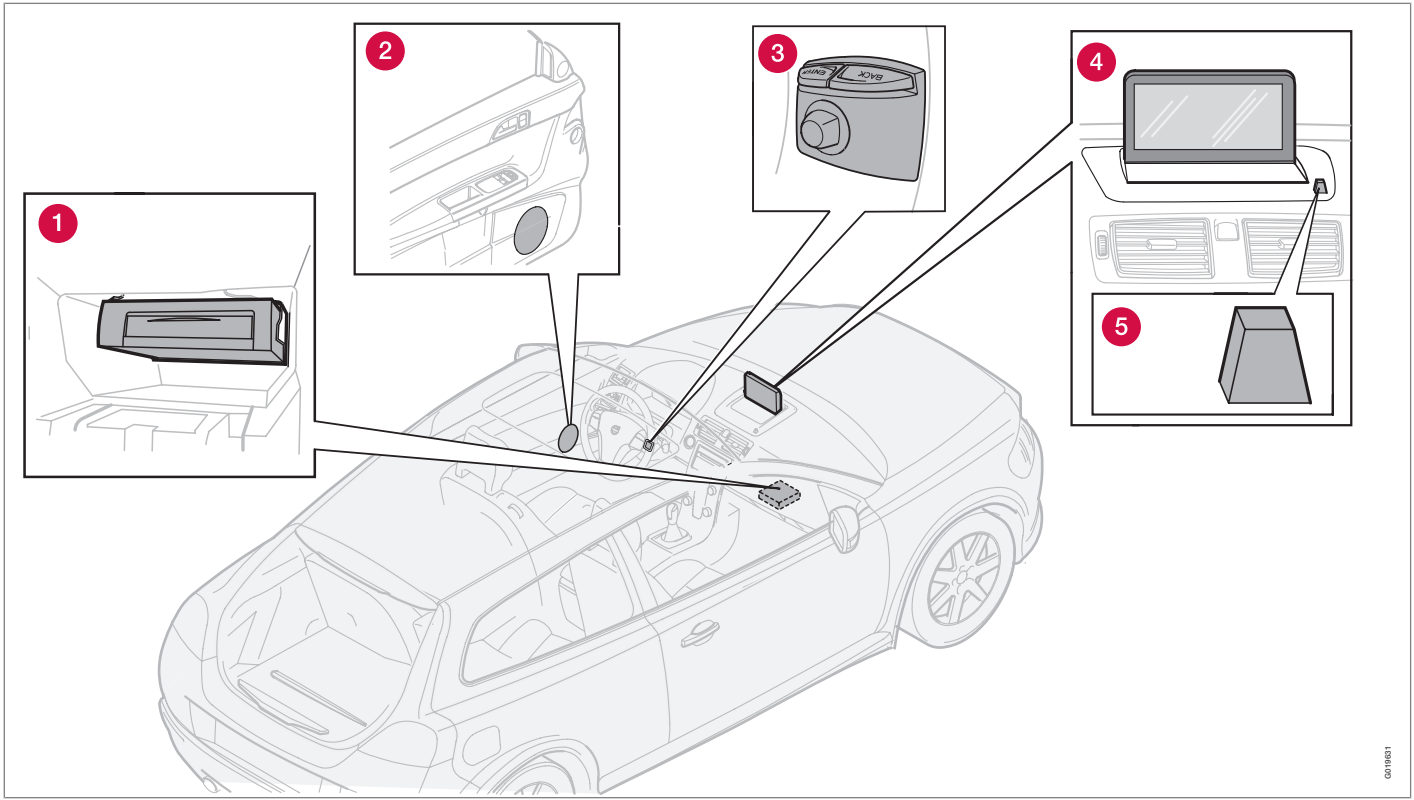
- When changing discs, make sure that they are kept free of oil, grease and other impurities.
- The discs must not be exposed to moisture.
- The discs must be kept in their packaging when not in use. Avoid storing discs in excessive heat, direct sunlight or in a dusty environment.

## Screen care

Clean the display screen with a soft, non-static cloth or a moist paper towel and a mild window cleaning agent.

Never use petroleum based solvents or abrasive substances when cleaning the screen.

## C30 system overview



## 1 Main unit

The main unit contains a hard drive, a DVD player (for navigation system map discs only) and an integrated GPS (Global Positioning System) receiver and a TMC (Traffic Message Channel) receiver.

The main unit has the following functions:

- Calculates the vehicle's current position
- Calculates the route to the selected destination
- Processes traffic information
- Provides voice guidance
- Stores map data
- Uses the DVD player to update map data and system software

### GPS receiver

The navigation system uses GPS signals, the vehicle's speedometer and a gyroscope to determine the vehicle's current location and direction.

### Traffic information – TMC (option)[1]

TMC is a standardized code system for transmitting traffic information. The receiver automatically tunes to the correct frequency and reception is handled by the audio system's FM antenna.

The area covered by the system is being steadily expanded, which makes occasional updates necessary, see page 11.

Regardless of whether the navigation system is in **Easy** or **Advanced** mode, broadcast traffic information is always received and presented. see page 66 for additional information.

## 2 Speakers

Sound from the navigation system comes through the audio system's front speakers.

## 3 Navigation control

See page 22.

## 4 Screen

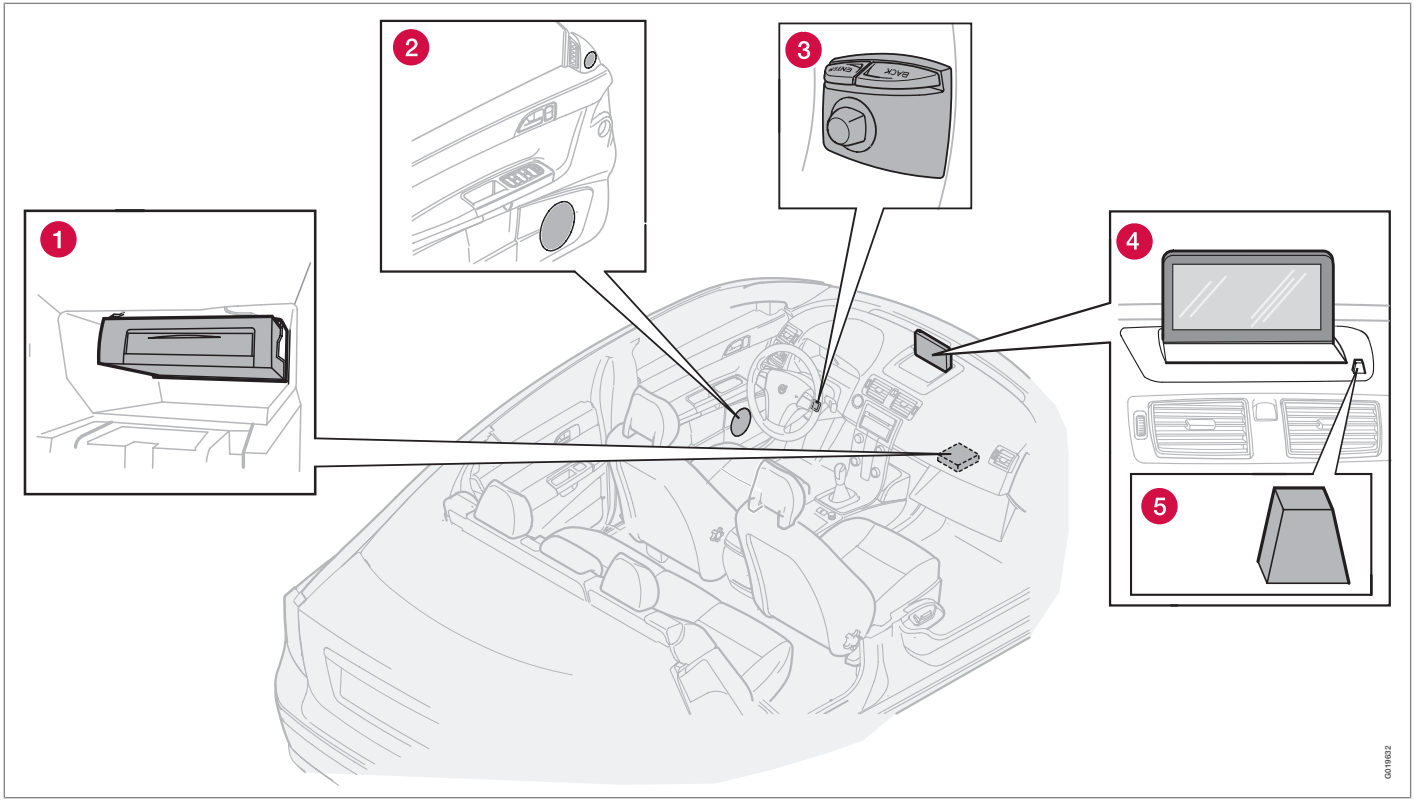
The screen displays the maps and provides detailed information on intersections, distances, etc. See page 11 for information on caring for the screen.

## 5 IR port for the remote control

See page 22.

[1] Not available in all markets.

## S40 system overview



## 1 Main unit

The main unit contains a hard drive, a DVD player (for navigation system map discs only) and an integrated GPS (Global Positioning System) receiver and a TMC (Traffic Message Channel) receiver.

The main unit has the following functions:

- Calculates the vehicle's current position
- Calculates the route to the selected destination
- Processes traffic information
- Provides voice guidance
- Stores map data
- Uses the DVD player to update map data and system software

### GPS receiver

The navigation system uses GPS signals, the vehicle's speedometer and a gyroscope to determine the vehicle's current location and direction.

### Traffic information – TMC (option)[1]

TMC is a standardized code system for transmitting traffic information. The receiver automatically tunes to the correct frequency and reception is handled by the audio system's FM antenna.

The area covered by the system is being steadily expanded, which makes occasional updates necessary, see page 11.

Regardless of whether the navigation system is in **Easy** or **Advanced** mode, broadcast traffic information is always received and presented. see page 66 for additional information.

## 2 Speakers

Sound from the navigation system comes through the audio system's front speakers.

## 3 Navigation control

See page 22.

## 4 Screen

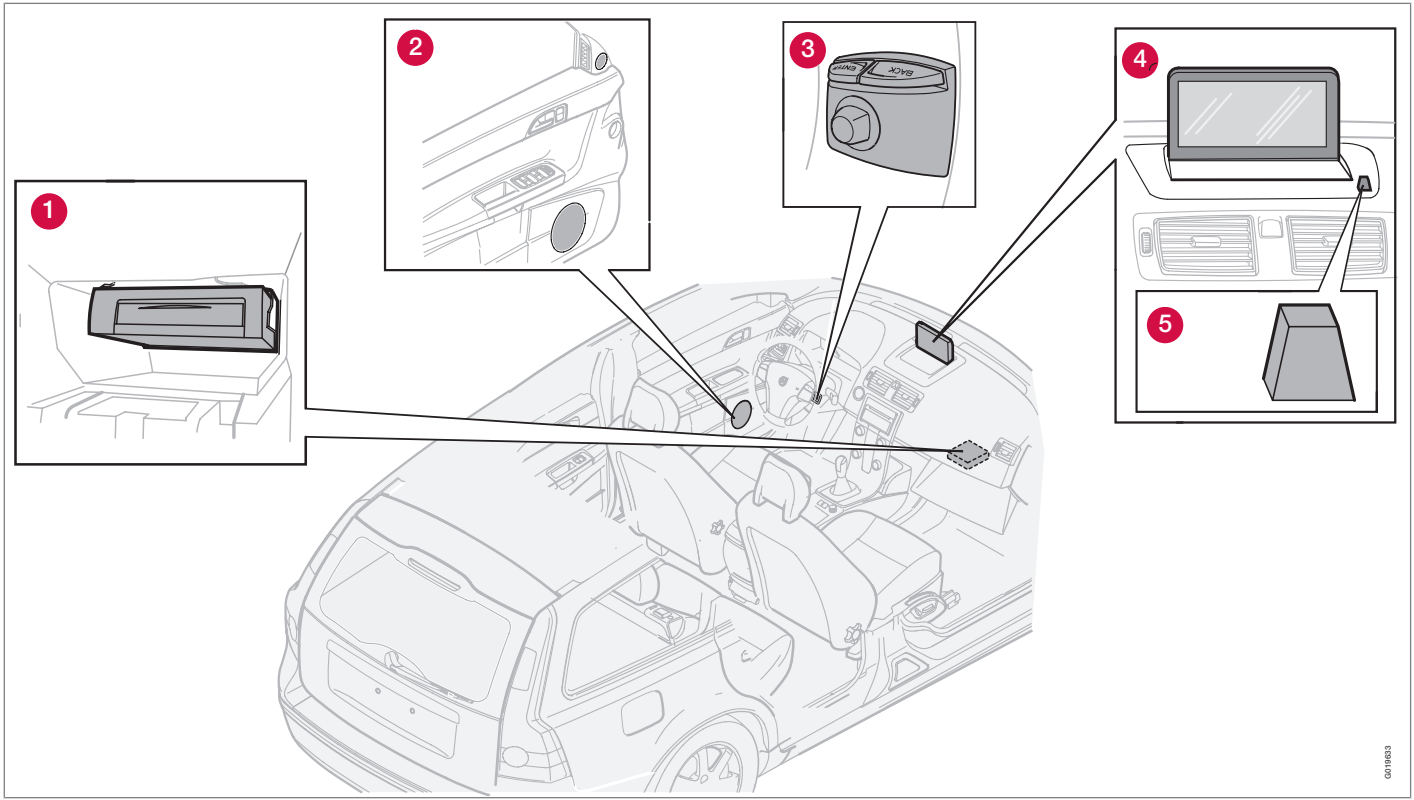
The screen displays the maps and provides detailed information on intersections, distances, etc. See page 11 for information on caring for the screen.

## 5 IR port for the remote control

See page 22.

[1] Not available in all markets.

## V50 system overview



## 1 Main unit

The main unit contains a hard drive, a DVD player (for navigation system map discs only) and an integrated GPS (Global Positioning System) receiver and a TMC (Traffic Message Channel) receiver.

The main unit has the following functions:

- Calculates the vehicle's current position
- Calculates the route to the selected destination
- Processes traffic information
- Provides voice guidance
- Stores map data
- Uses the DVD player to update map data and system software

### GPS receiver

The navigation system uses GPS signals, the vehicle's speedometer and a gyroscope to determine the vehicle's current location and direction.

### Traffic information – TMC (option)[1]

TMC is a standardized code system for transmitting traffic information. The receiver automatically tunes to the correct frequency and reception is handled by the audio system's FM antenna.

The area covered by the system is being steadily expanded, which makes occasional updates necessary, see page 11.

Regardless of whether the navigation system is in **Easy** or **Advanced** mode, broadcast traffic information is always received and presented. see page 66 for additional information.

## 2 Speakers

Sound from the navigation system comes through the audio system's front speakers.

## 3 Navigation control

See page 22.

## 4 Screen

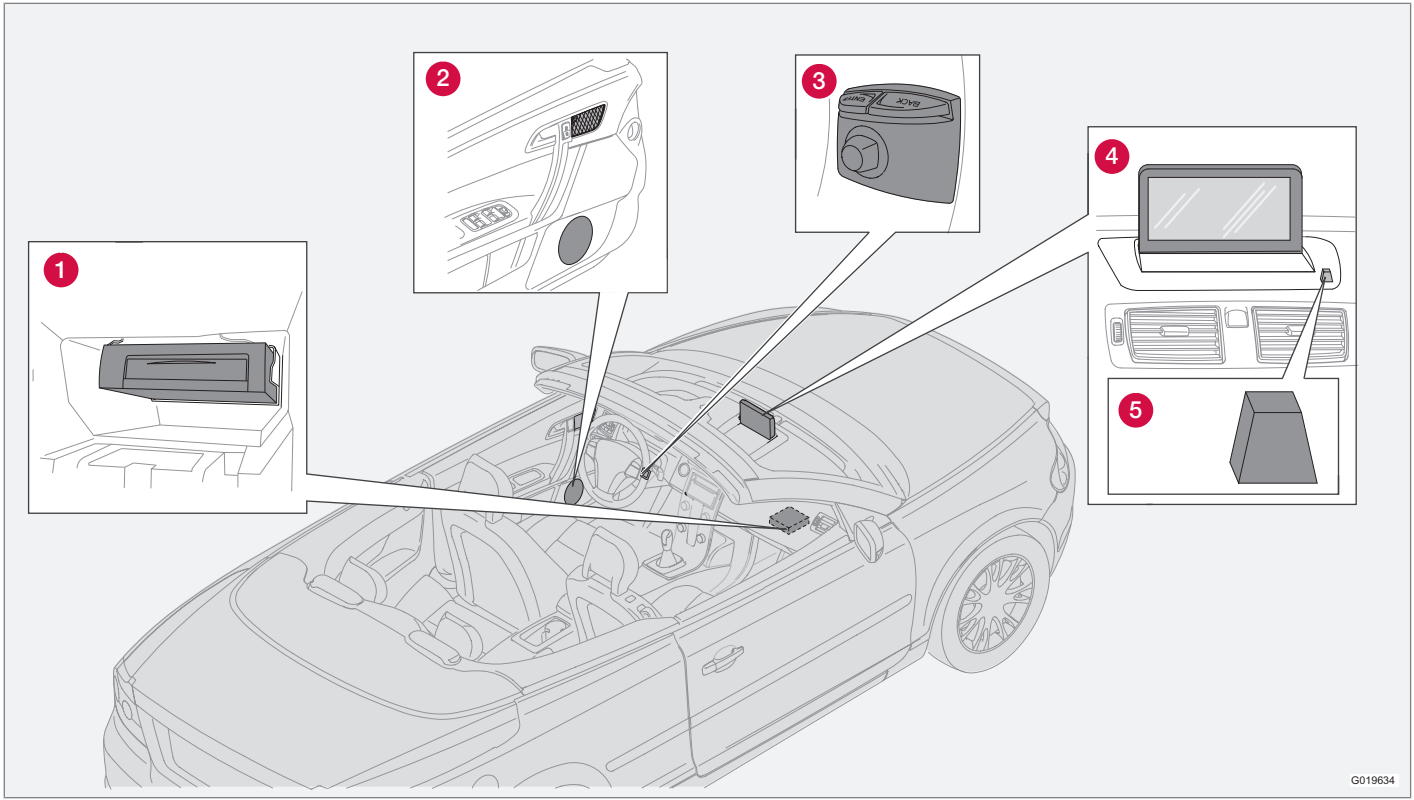
The screen displays the maps and provides detailed information on intersections, distances, etc. See page 11 for information on caring for the screen.

## 5 IR port for the remote control

See page 22.

[1] Not available in all markets.

## C70 system overview



## 1 Main unit

The main unit contains a hard drive, a DVD player (for navigation system map discs only) and an integrated GPS (Global Positioning System) receiver and a TMC (Traffic Message Channel) receiver.

The main unit has the following functions:

- Calculates the vehicle's current position
- Calculates the route to the selected destination
- Processes traffic information
- Provides voice guidance
- Stores map data
- Uses the DVD player to update map data and system software

### GPS receiver

The navigation system uses GPS signals, the vehicle's speedometer and a gyroscope to determine the vehicle's current location and direction.

### Traffic information – TMC (option)[1]

TMC is a standardized code system for transmitting traffic information. The receiver automatically tunes to the correct frequency and reception is handled by the audio system's FM antenna.

The area covered by the system is being steadily expanded, which makes occasional updates necessary, see page 11.

Regardless of whether the navigation system is in **Easy** or **Advanced** mode, broadcast traffic information is always received and presented. see page 66 for additional information.

## 2 Speakers

Sound from the navigation system comes through the audio system's front speakers.

## 3 Navigation control

See page 22.

## 4 Screen

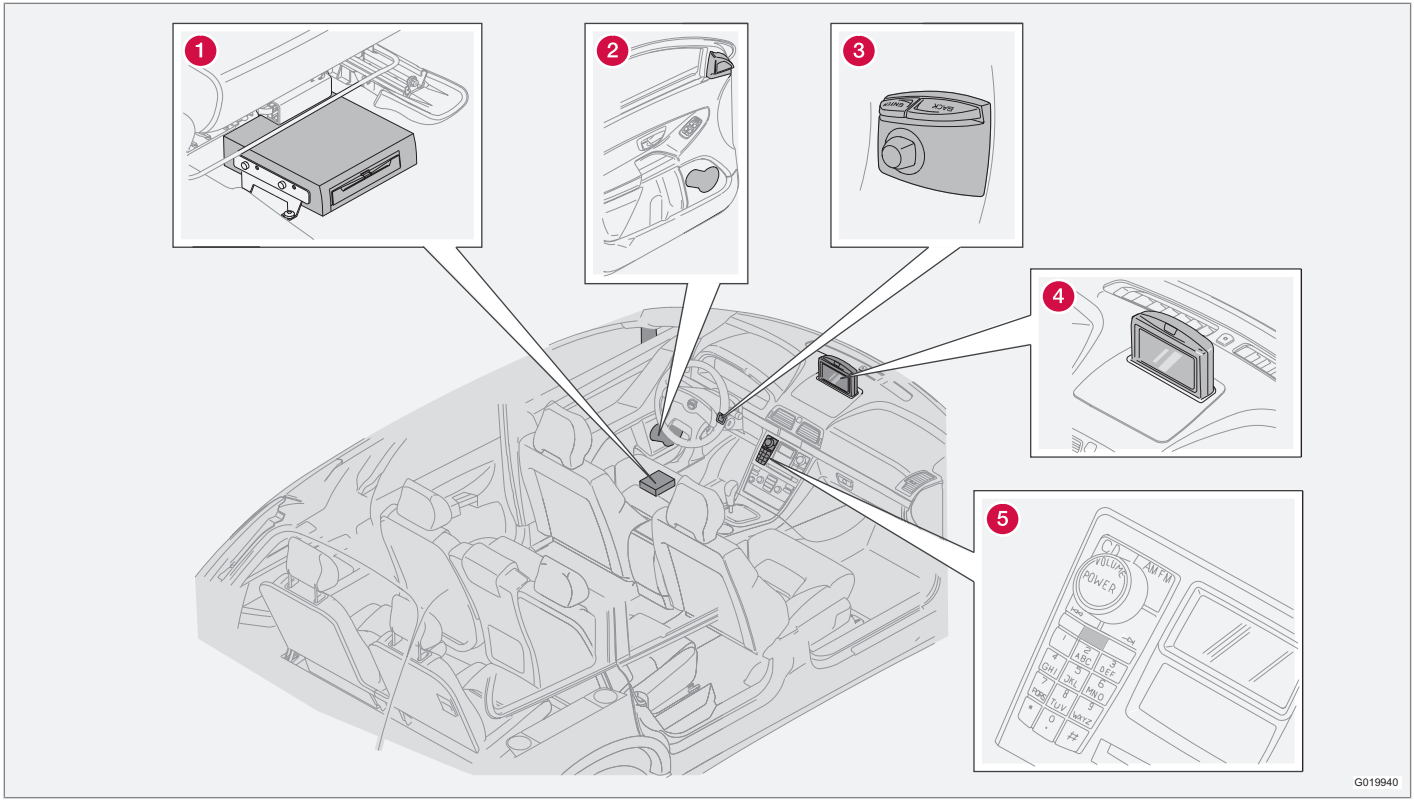
The screen displays the maps and provides detailed information on intersections, distances, etc. See page 11 for information on caring for the screen.

## 5 IR port for the remote control

See page 22.

[1] Not available in all markets.

## XC90 system overview



## 1 Main unit

The main unit contains a hard drive, a DVD player (for navigation system map discs only) and an integrated GPS (Global Positioning System) receiver and a TMC (Traffic Message Channel) receiver.

The main unit has the following functions:

- Calculates the vehicle's current position
- Calculates the route to the selected destination
- Processes traffic information
- Provides voice guidance
- Stores map data
- Uses the DVD player to update map data and system software

### GPS receiver

The navigation system uses GPS signals, the vehicle's speedometer and a gyroscope to determine the vehicle's current location and direction.

### Traffic information – TMC (option)[1]

TMC is a standardized code system for transmitting traffic information. The receiver automatically tunes to the correct frequency and reception is handled by the audio system's FM antenna.

The area covered by the system is being steadily expanded, which makes occasional updates necessary, see page 11.

Regardless of whether the navigation system is in **Easy** or **Advanced** mode, broadcast traffic information is always received and presented. see page 66 for additional information.

## 2 Speakers

Sound from the navigation system comes through the audio system's front speakers.

## 3 Navigation control

See page 22.

## 4 Screen

The screen displays the maps and provides detailed information on intersections, distances, etc. See page 11 for information on caring for the screen.

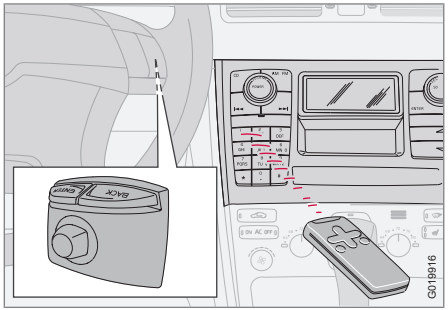
## 5 IR port for the remote control

See page 22.

[1] Not available in all markets.

## Navigation system controls

### Location of the navigation control and IR port



The navigation system can be operated with the steering wheel-mounted navigation control or with the remote control.

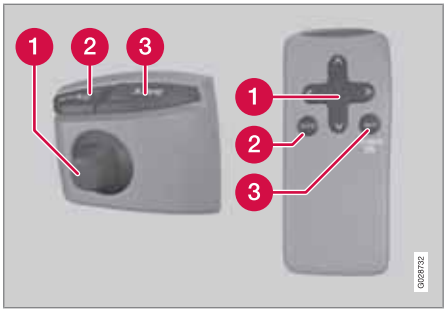
The **navigation control** is located on the right, rear side of the steering wheel.

Point the remote toward the IR port located at the screen (only the XC90 has the IR port on the audio system as shown above).

**NOTE**

The remote control runs on AAA or R03 batteries. Check the batteries if the remote does not function properly.

### Navigation control/remote control




The navigation control and remote control have the same functions. Each enables you to navigate through the menus and make settings/selections.

1. Use the **navigation control** to move among various menu alternatives or to move the cross hairs on the map. The buttons <, ∧, > and ∨ on the **remote control** can be used for the same purpose.
2. **ENTER** – Confirms or activates selections.
3. **BACK** – Press this key to go to the previous menu or to undo a selection.

**NOTE**

The exact design of the navigation control may vary from model to model.

### "Do not disturb"

In certain situations, the system may need a few extra seconds to calculate a route. A symbol will be displayed while this is taking place.

**NOTE**

While the route calculation symbol is displayed, the navigation system cannot accept any commands from the **navigation control**, or the **ENTER** or **BACK** buttons.

## Entering letters and selecting alternatives

The on-screen keyboard is used in many situations in the menus to select specific information such as points of interest, a state/city/street address/zip code, etc.

- Select letters with the **navigation control** and press **ENTER**.

When there are no further alternatives, the entire name will be displayed automatically.

The list at the bottom of the screen shows the first three possible alternatives made available by the letters that have been entered.

1. You can also go directly to the list of names by pressing ▼.
2. Select a name and press **ENTER**.

The scroll bar at the right of the screen indicates that there are more alternatives than can be displayed at one time.

The figure shown indicates the number of names on the list.

- Press **BACK** to exit the list of names.
- You can also press **BACK** to delete letters one at a time

## General searches

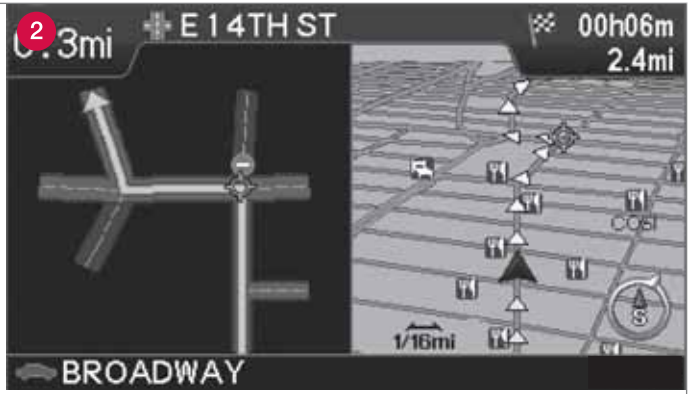
Searches can be made at any time and always function in the same way, regardless of where you may be in the menu system when a destination is selected.

Pressing **ENTER** while keying in characters displays all result combinations for the respective selections: City, Street, Points of interest, etc.

For example, when searching for **Newark Airport**, all combinations of **Newark** will be displayed when **NE** is entered. As the search becomes more specific, fewer alternatives will be displayed, making selection easier.

A search beginning with **NE** will also display, for example, **NE**wmaket restaurant since all alternatives containing a number of words separated by spaces are included in the search.

## Display and voice guidance



## Display appearance

The screen display is determined by factors such as geographic location and settings that have been made, such as map scale, the symbols selected to be displayed, etc.

An explanation of the text, signs, and symbols that may be displayed on the screen can be found on the inside of the front cover of this manual.

1. On a highway. The screen will display the points of interest along the highway. This function is available even if a destination has not been selected. A scroll list at the right indicates that there are additional alternatives.
2. Detailed map showing intersections. The screen will display lanes on the road to help you select the correct one at the next intersection. This function is only available on major roads. Voice guidance is also always provided.
3. Two maps have been selected in **Settings**. Both sections of the screen display the same map, but with different scales, see p. 38 for more information.
4. Map scroll mode.

## Voice guidance

After a destination and guidance has started, a voice message indicating the action to be taken and distance will be provided as you approach an intersection, exit, etc. A detailed map of the intersection will also be displayed. The message will be repeated as you come closer to the intersection.

The upper row on the screen shows the distance to the next exit or turn, and the name of the exit.

The next row provides road sign information. If the number of the road or exit, or the name of the exit are available, this information will also be displayed.

The vehicle's current location is shown at the bottom of the screen.

### Toll booths

When driving on toll roads, you will receive voice notification as you approach toll booths.

This message will only be provided if a destination has been selected.

**NOTE**

Toll booths are shown on the map but cannot be searched for as points of interest.

## Unverified roads and Compass

### Unverified roads

A small number of roads in the system may be unverified. This means that information on signs, one-way streets, left turns, etc., may not be accurate. An itinerary containing unverified roads will be displayed with gray arrows instead of the usual yellow ones.

The system provides information when an unverified road is added to an itinerary and when the vehicle begins to travel on one of these roads.

**WARNING**

Always use good judgment when following navigation system guidance, and do not follow guidance that seems contrary to your own best judgment.

Never use the navigation system or any other feature in your vehicle in a way that distracts you from the task of driving safely. Distraction can lead to a serious accident.

Set and make changes in your navigation system only with the vehicle parked.

Be aware of the current traffic situation.

Always comply with relevant traffic regulations.

### Compass

The compass can be displayed in two ways:

– With north always at the top of the screen.

– With the vehicle's current direction at the top of the screen.

The red point of the compass needle points north on the map.

The gray destination arrow in the outer ring of the compass points toward the destination.

Go to **Map Options** under **Settings** to change the way in which the compass is displayed or to hide it.

## Menus on two levels – Easy mode

- Set destination
  - → Address
  - → Points Of Interest (POI)
  - → Last 20
  - → Point on map
- Show destination
- Remove destination
- Settings
  - → Guiding voice
  - → Guiding volume
  - → Language
  - → Color
  - → Map view
  - → Distance unit
  - → User mode
- Shut down

For information on all of the menu alternatives in Easy mode, see page 33.

## Menus on two levels – Advanced mode

- Set destination
  - → Address
  - → Points Of Interest (POI)
  - → Stored locations
  - → Last 20
  - → Return trip
  - → Point on map
  - → Latitude/longitude
- Itinerary
  - → Start guidance
  - → Add to itinerary
  - → Route options
  - → Clear itinerary
- Next destination
- Current position

## Menu selections

**Settings**

- **Traffic information**
- **Route options**
- **Map options**
- **Guiding options**
- **System options**
- **Start demo**

**Shut down**

For information on all of the menu alternatives in Advanced mode, see page 46.

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# 02

## EASY USER MODE

## Main menu, Shortcut menu, Scroll menu

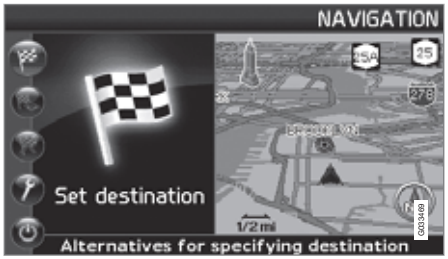


### Introduction

The navigation system starts in **Easy** user mode.

The most important menus are available in this mode, which makes things easier if changes in **Settings** are not often made.

### Main menu




The main menu is at the top of the menu structure and can be accessed by pressing the **BACK** key several times.

#### Switching between settings

To switch between Easy and advanced modes, go to **Settings** ➔ **System options** ➔ **User mode**.

### Shortcut menu

This menu offers icons for making quick setting changes.

- Press **ENTER** in map mode and select a sub-menu with < or >.

**– Map scale/Current route**

Change the map scale for a larger perspective or to display greater detail.

At the top of the menu, you can choose to see either the remainder of the route[1] to the destination from your current location, or the entire route.

The map scale can be changed from 1/32 of a mile to 60 miles. Hold the button down until the map scale of your choice is displayed, and release the button.

**– Guidance**

Press **ENTER** to repeat voice guidance.

#### Traffic information (option)[2]

Regardless of whether the navigation system is in **Easy** or **Advanced** mode, broadcast traffic information is always received and presented. see page 66 for additional information.

### Scroll menu

- Activate map scrolling by pressing the **navigation control**.
- Press **ENTER** in scroll mode to activate the Scroll menu.

#### Scale

This function changes the scale of the area in which you are currently driving. The scale can be changed from 150 ft to 60 miles.

#### Set as destination

Select a position on the map. Guidance will begin immediately.

[1] A destination must be selected.
[2] Not available in all areas.

## Menu selections



Three levels of the menu structure are shown here. A number of the third level menus also have sub-menus, which are described in detail in their respective sections in this manual.

| | |
|---|---|
| **Set destination** | |
| ➔ **Address**<br>State/City/Number/ Street/Interse. | p. 34 |
| ➔ **Points Of Interest (POI)** | p. 35 |
| ➔ **Last 20** | p. 35 |
| ➔ **Point on map** | p. 36 |
| **Show destination** | p. 37 |
| **Remove destination** | p. 37 |
| **Settings** | |
| ➔ **Guiding voice**<br>Female/Male | p. 38 |
| ➔ **Guiding volume**<br>Off/1/2/3/4/5 | p. 38 |
| ➔ **Language**<br>US English/Espanol/ Francais CAN | p. 38 |
| ➔ **Color**<br>Black/Chrome/Blue/ Dark | p. 38 |
| ➔ **Map view**<br>2D/3D | p. 38 |
| ➔ **Distance unit**<br>Km/Miles | p. 38 |
| ➔ **User mode**<br>Easy/Advanced | p. 38 |
| **Shut down** | p. 9 |

## Setting a destination



### Selecting an address

Set destination ➔ Address

**Selecting a street address**
The system will place the cursor on Street. The most recently selected State and City will be pre-selected.

1. To change the state or city, use the **navigation control** to move to State and/or City.
2. Press **ENTER**, or choose among the most recently chosen alternatives with ➔.

**NOTE**

The definition of a city or area may vary. It will sometimes be an entire city, or a particular section of a city.

The system does not contain street addresses for very small towns or villages. In these cases, the center of the town is used as the destination.

**Alternative 1**

- Select Street without choosing a city.

The system will provide guidance to the mid-point of the selected street. If the street exists in more than one city, a list of alternatives will be displayed.

**Alternative 2**

1. Begin by selecting a City.
2. Select a Street.

**Selecting a street number**
If the address selected has a street number, this can be used as a specific destination.

1. After selecting a street, go to the Number row and press **ENTER**

   or

   Go directly to Set. Alternative street numbers will be displayed.
2. Go to Set after you have entered a street number.

   If a street number has not been entered, the system will guide you to the mid-point of the selected street.

**Set**
Confirms the entered number.

**Undo**
Returns to the previous screen.

**Selecting an intersection**

- Go to Interse. and choose a street that intersects the selected street.

**Start guidance**

- Go to Start guidance to begin receiving directions to the destination.

## Search using a Zip code

Set destination ➔ Address ➔ City

Instead of searching in a city, you can opt to search for an area's Zip code.

1. Go to **ZIP code** and press **ENTER**.
2. Select the digits in the Zip code and press **ENTER**

   or

   Select a Zip code from the list.
3. Go to **Street** to select a street with the Zip code entered and press **ENTER**.
4. Go to **Start guidance** to begin receiving directions to the destination.

**NOTE**

This also applies to searches using Points of interest.

## Point of Interest (POI)

Set destination ➔ Points of interest

Points of interest include gas stations, hotels, restaurants, Volvo retailers, hospitals, parking lots, etc.

1. Highlight menu alternative **POI**.
2. Press **ENTER** to access a sub-menu with different search options in order to select a point of interest.

3. Go to **Type**, press **ENTER**.
4. Select a POI from the list provided, press **ENTER**.
5. In the list **All names**, select a name from the list.
6. Press **ENTER** to display all information about the selected POI.
7. Press **ENTER** to start guidance.

## Last 20

Set destination ➔ Last 20

This is a list of the twenty most recently selected destinations. The scroll bar at the right of the screen indicates that there are more alternatives than can be displayed at one time.

- Go to the desired destination and press > or **ENTER** to access the sub-menu.

## Setting a destination



**Set as destination**
Adds the destination to the itinerary.

**Delete location**
Remove the destination from the **Last 20** list.

### Point of the map

**Set destination ➔ Point on map**

1. Use the **Arrow keys** to move the cursor to the desired destination, press **ENTER** to access the map scroll menu.
2. Select **Set as destination** and press **ENTER**.

**NOTE**

A position on the map can be selected directly with the cursor by using the **Arrow keys** in map mode.

## Show the destination on the map

Show destination

- Press **ENTER** for an overview on the map of the area that you have selected as your final destination.

## Remove the destination

Remove destination

1. Press **ENTER** and go to the destination to be deleted.
2. Press **ENTER** again.

## Settings



### Guiding voice

Settings ➔ Guiding voice

Select a male or female voice for directions.

### Guiding volume

Settings ➔ Guiding volume

Set the volume level for voice guidance or turn off this function.

### Language

Settings ➔ Language

Select the language for menus, text and voice messages.

### Colors

Settings ➔ Color

There are 4 screen settings that can be made – choose the one that you prefer.

### Two-dimensional (2D) or three-dimensional (3D)

Settings ➔ Map view

The map can be displayed in 2D (viewed straight from above) or in 3D (an angled view from above).

### Distance unit

Settings ➔ Distance unit

Choose between **miles** and **kilometers**.

### User mode

Settings ➔ User mode

Switch between the **Easy** and **Advanced** user modes.

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Setting a destination..... 48
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# 03

## ADVANCED USER MODE

## Main menu, Shortcut menu

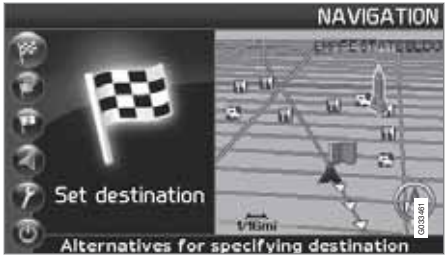
### Introduction

The **Advanced** user mode can be selected when the navigation system starts.

This mode provides access to all of the system's settings and functions.



### Main menu




The main menu is at the top of the menu structure and can be accessed by pressing the **BACK** key several times.

#### Switching between settings

To switch between Easy and advanced modes, go to **Settings** ➔ **System options** ➔ **User mode**.

### Shortcut menu

This menu offers icons for making quick setting changes.

- Press **ENTER** in map mode and select a sub-menu with < or >.

Most system settings can be made in **Settings** in the main menu while the remaining ones can only be made in the Shortcut menu.

#### Quick storage of the current position

It is possible to store the vehicle's current location on the map by simply pressing one button.

- Press and hold **ENTER**: press the button until the screen changes appearance.

The newly stored location will be indicated by this symbol. The information linked to this position can be edited by going to **Stored location** ➔ **Adjust**, see page 54.

#### – Map scale/Current route

A menu with 4 alternatives will be displayed.

Pressing **ENTER** on the first alternative displays a map showing the remainder of the route [1] from the vehicle's current location to the destination.

Pressing **ENTER** on the second alternative displays a map showing the entire route[1].

Pressing **ENTER** on the alternatives (+) or (–) changes the map scale in different steps from 1/32 of a mile to 60 miles to make it possible to see either a larger perspective or greater detail.

The map scale can be changed freely by holding down **ENTER** until you see the scale of your choice.

If you have chosen to display two maps, the map scale symbol is displayed at both ends of the Shortcut menu to make it possible to adjust the maps scales individually.

#### – Guidance

Press **ENTER** for guidance or to repeat voice guidance.

#### – Map/Route

**Route outline**

A list of coming guidance points. In addition to the name of the road or street, the distance between guidance points and an arrow showing the type of action to be taken will be displayed.

[1] A destination must be selected

**One map/Two maps**
Choose to display either one or two maps of the area in which you are traveling.

**Surveillance**[2]
This function makes it possible to store map views of 3 different areas for surveillance, such as ones with heavy traffic, road construction areas, etc.

Select **Surveillan. 1, 2** or **3** to view previously set surveillance areas, see page 45.

**– Detour**

This displays a menu with **Avoid** and the available alternatives. **1-3-6-12-25-50 miles**.

**Avoid streets/roads**
This function removes streets or roads from a set itinerary to help you avoid driving through road construction areas, etc.

1. Select **Avoid** in the **Detour** menu and press **ENTER**. A list of streets included in your route will be displayed.
2. Go to the street to be avoided and press **ENTER**.
3. Select other streets with ∧ or ∨ and press **ENTER**.

   Whenever possible, the system will then calculate a new route that will guide you back to the original one after you have passed the area(s) to be avoided.

**Avoid next ½–50 miles**
This function enables you to avoid an entire area in the original itinerary, for example to avoid a city during rush hour..

– Select an alternative in the **Detour** menu **½–50** miles and press **ENTER**.

Whenever possible, the system will then calculate a Detour that will guide you back to the original route after you have passed the area(s) to be avoided.

It is also possible to avoid a certain area by drawing a box directly on the map, see **Avoid specified areas** under

| **Settings ➔ Route options** |
|---|

on page 58.

**– Traffic information (option)**[3]
Choose to read information on traffic disruptions in the area displayed on the screen.

A change in map scale also changes the number of messages displayed, see page 32, see page 42 or see page 70.

**Read message**
Scroll among the messages displayed on the screen.

**Show all**
Display all messages.

**Hide all**
Do not display traffic messages.

**Show selected**
Select the types of traffic messages to be displayed on the map.

Regardless of whether the navigation system is in **Easy** or **Advanced** mode, broadcast traffic information is always received and presented. see page 66 for additional information.

**– Points of interest (POI)**
Displays a menu with different ways of searching for a point of interest.

**Around the car**
Pressing **ENTER** makes it possible to search for POIs around the vehicle.See page 49.

2 Only available in areas with TMC reception.
3 Not available in all areas.

## Main menu, Shortcut menu

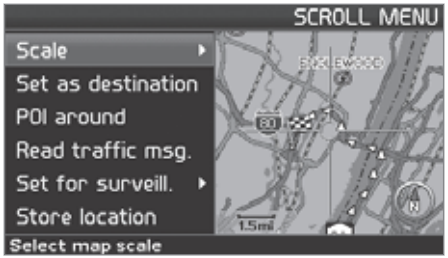
**Along the route**
Pressing **ENTER** makes it possible to search along the route. See page 49.

**Along HWY**
Pressing **ENTER** makes it possible to search along the highway on which you are currently driving.

Choose to search for rest areas, gas stations, restaurants, etc., that are easy to access from the highway.

If a route crosses a number of highways, the system will search along the highway on which you are traveling.

## Map scroll menu




1. Activate map scrolling with the **navigation control**.
2. Press **ENTER** in scroll mode to display the scroll menu.

### Scale
Change the map scale over the area selected.

### Set as destination
Add the location as a destination in an itinerary.

### POI around
Search for nearby points of interest.

### Read traffic msg.
Search for current traffic messages in the area.

### Surveillance[1]
Select between **Set for surveill. 1, 2** or **3** and press **ENTER** to store a map view you want to save as a surveillance area, e.g. heavily trafficked roads that are often subject to traffic problems.

### Activating the map
Select map options in the Shortcut menu and select the areas requiring surveillance.

### Store location
Save the location for later use in **Set destination ➔ Stored locations**.

### Following a route on the map
To make it easy to follow a set itinerary, the system has a built-in "magnet" function. This means that regardless of the number of turns or changes of direction in the route, the cross hairs will follow the route by simply holding down a button.

One of the lines in the cross hairs will be displayed darker than the other one to indicate which button should be pressed.

*Use button ❮ or ❯ to follow the route automatically.*

*Use button ∧ or ∨ to follow the route automatically.*

To deactivate the "magnet" function, move the cross hairs slightly away from the route until the line in the cross hairs is no longer dark. Scrolling will then function normally.

[1] Not available in all areas.

## Menu selections

Three levels of the menu structure are shown here. A number of the third level menus also have sub-menus, which are described in detail in their respective sections in this manual.



| | |
|---|---|
| **Set destination** | p. 48 |
| ➔ **Address**<br>State<br>City<br>Number<br>Street<br>Interse. | p. 48 |
| ➔ **Points Of Interest (POI)**<br>POI by name<br>Around the car<br>Along the route<br>Around point on map<br>Along a street | p. 49 |
| ➔ **Stored locations**<br>Add to itinerary/Information/Edit/Sorting/Delete location | p. 50 |
| ➔ **Last 20**<br>Add to itinerary/Information/Delete location | p. 50 |
| ➔ **Return trip**<br>see Itinerary | p. 50 |
| ➔ **Point on map** | p. 50 |
| ➔ **Latitude/longitude** | p. 51 |
| **Itinerary** | p. 53 |
| ➔ **Start guidance** | p. 53 |
| ➔ **Add to itinerary**<br>see Set destination ➔ Address | p. 53 |
| ➔ **Route options**<br>Route<br>Avoid highways/toll roads/ferries/car train/time-restr. roads/specified areas<br>Reset to default | p. 58 |
| ➔ **Clear itinerary** | p. 53 |
| **Next destination** | p. 48 |
| ➔ **Address**<br>see Set destination ➔ Address | p. 48 |
| **Current position** | p. 56 |
| **Settings** | p. 58 |

## Menu selections

| | |
|---|---|
| ➔ **Traffic information**[A] | p. 69 |
| Dynamic route guidance | |
| Traffic-info. selection | |
| Search stations | |
| Current station | |
| Traffic service | |
| Reset to default | |
| ➔ **Route options** | p. 58 |
| Route | |
| Avoid highways/toll roads/ferries/car train/ time-restr. roads/specified areas/traffic problems | |
| Reset to default | |

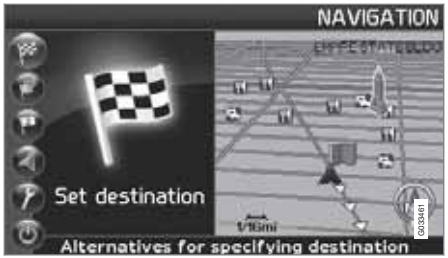
| | |
|---|---|
| ➔ **Map options** | p. 59 |
| POI selection | |
| Map | |
| Map view | |
| 2D map orientation | |
| Right map view | |
| Left map view | |
| Compass | |
| Current location | |
| Reset to default | |
| ➔ **Guiding options** | p. 59 |
| Time/dist. to go | |
| POI warning | |
| Charge area warning | |
| Reset to default | |

| | |
|---|---|
| ➔ **System options** | p. 60 |
| Guiding voice | |
| Guiding volume | |
| Language | |
| Menu color | |
| Map color | |
| Screen saver | |
| Help | |
| Distance unit | |
| User mode | |
| Date & time info | |
| GPS Information | |
| About | |
| Reset to default | |
| ➔ **Start demo** | p. 62 |
| **Shut down** | p. 9 |

[A] Option. Not available in all markets.

## Setting a destination

### Selecting an address




### Selecting a street address

Set destination ➔ Address

The system will place the cursor on Street. The most recently selected State and City will be pre-selected.

1. To change the state or city, use the **navigation control** to move to State and/or City,
2. Press **ENTER**, or choose among the most recently chosen alternatives with >.

**NOTE**

The definition of a city or area may vary. It will sometimes be an entire city, or a particular section of a city.

The system does not contain street addresses for very small towns or villages. In these cases, the center of the town is used as the destination.

#### Alternative 1

- Select Street without choosing a city.

The system will provide guidance to the midpoint of the selected street. If the street exists in more than one city, a list of alternatives will be displayed.

#### Alternative 2

1. Begin by selecting a City.
2. Select a Street.

### Selecting a street number

If the address selected has a street number, this can be used as a specific destination.

1. After selecting a street, go to the Number row and press **ENTER**

   or

   Go directly to Set. Alternative street numbers will be displayed.
2. Go to Set after you have entered a street number.
   > If a street number has not been entered, the system will guide you to the midpoint of the selected street.

#### Set

Confirms the entered number.

#### Adjust

Returns to the previous screen.

### Selecting an intersection

- Go to Interse. and choose a street that intersects the selected street.

### Start guidance

- Go to Set to add the entered address to the itinerary.
- Go to Start guidance to begin receiving directions to the destination.

#### Information

Provides information about the destination.

## Search using a Zip code

Set destination ➔ Address ➔ City

Instead of searching in a city, you can opt to search for an area's Zip code.

1. Go to **ZIP code** and press **ENTER**.
2. Select the digits in the Zip code and press **ENTER**

   or

   Select a Zip code from the list.
3. Go to **Street** to select a street with the Zip code entered and press **ENTER**.
4. Go to **Start guidance** to begin receiving directions to the destination.

**NOTE**

This also applies to searches using Points of interest.

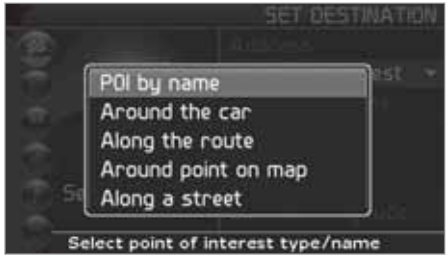
## Point of Interest (POI)

Set destination ➔ POI

Points of interest (POI) include gas stations, hotels, restaurants, Volvo retailers, hospitals, parking lots, etc.

- Press **ENTER** to access a sub-menu with different search options in order to select a point of interest.

### POI by name




Enter the name of the point of interest, or select an alternative in the menu. The list only shows the points of interest in the selected city/area.

#### Around the car

The system will search for POIs around the car (max. 60 mile radius) The search will stop after 40 POIs have been found.

#### Along the route

If a destination has been selected, the system can search for points of interest along the route (within approx. 0.5 miles from the route).

#### Around point on map

The system will perform the same type of search as for **Around the car**, but the search will be based on a point on the map.

#### Along street

The system will search along a specified street.

## Setting a destination

**NOTE**

You can also search for Points of interest around the car, along the route, or along the highway in the Shortcut menu, see page 32.



### Types of points of interest/Different categories

Set destination ➔ POI ➔ POI by name

The system will first place the cursor on Type. The most recently selected State and City should be displayed.

If this is not the case:

1. Go to State and/or City and press **ENTER**

   or

   Choose among the most recently selected ones using ➔.
2. Go to Name and press **ENTER** to select a POI without specifying a city.
3. Go to Set and press **ENTER**.
4. Then go to Start guidance and press **ENTER** to receive directions to the destination.

**NOTE**

For a more detailed search, first select City and then go to Name.

There are sub-categories for restaurants, etc., to simplify the search.

### Information about the point of interest

Information shows the address, geographic coordinates, and in certain cases, also the telephone number of the point of interest.

**Map**
Shows the POI's location on the map.

**2nd POI**
Points of interest such as airports often have restaurants, gas stations, etc., on site.

Instead of searching for a restaurant in the main menu, you can choose a restaurant directly under the selected airport. Avoiding alternatives outside of the airport makes the search quicker and easier.

## Stored locations

### Previously stored locations

Set destination ➔ Stored locations

A stored location is a previously stored destination, such as a home address, favorite restaurant, an airport, or a Volvo retailer. Information about storing locations can be found on see page 54.

- Navigate among the stored locations and press ➔ or **ENTER** to access the submenu.

**Add to itinerary**
Place the stored location in the itinerary.

**Information**
Provides information about the stored location.

**Edit**
Change the name, add a sound, etc., for the stored area. See also the heading "Add information about a stored location."

**Sorting**
Sort the list of stored locations by icon or name.

**Delete location**
Deletes the stored location.

### Select a position for a new stored location

1. Select Edit,

2. Use >, to go to Adjust.
3. Press **ENTER** to specify a position on the map for a new stored location.
4. Move the cursor with the **navigation control** to a new position and press **ENTER**.
5. Then select Store and press **ENTER** to store the new location.

### Add information about a stored location

– Select Edit and use > to go to Add info.. Press **ENTER** to add additional information about the stored location.

The following can be added to each stored location:

- Alert On/Off (to remind the driver that he/she is approaching the stored location)
- Icon
- Name
- Address
- City
- State
- Phone
- E-mail
- URL

## Last 20

Set destination ➔ Last 20

This is a list of the twenty most recently selected destinations. The scroll bar at the right of the screen indicates that there are more alternatives than can be displayed at one time.

- Go to the desired destination and press > or **ENTER** to access the sub-menu.

**Add to itinerary**
Adds the destination to the itinerary.

**Information**
Provides a summary about the destination.

**Delete location**
Remove the destination from the Last 20 list.

## Return trip

Set destination ➔ Return trip

- Select Start guidance and press **ENTER**.

The system will begin guiding you back to the location where Start guidance was most recently selected.

## Point on the map

### Searching via a point on the map

Set destination ➔ Point on map

1. Use the **navigation control** to move the cursor to the desired destination.
2. Press **ENTER** to access the map scroll menu.
3. Select Set destination, see page 45.

**NOTE**

A position on the map can be selected directly with the cursor by using the **navigation control** in map mode.

## Latitude/longitude

### Search by coordinates

Set destination ➔ Latitude/longitude

1. Select a destination by specifying coordinates on the map.
2. Select a latitude with the **navigation control**: N for north or S for south.
3. Go to the second row to specify a longitude: select E for east or W for west.

## Setting a destination

> **OK**

Shows the position with the specified coordinates on the map.

4. Press **ENTER** to access the map scroll menu.
5. Go to **Set as destination** and press **ENTER** to select the position as a destination.
6. Press **BACK** to resume entering coordinates.

> **Cancel**

Return to the previous screen.

## Making an itinerary

### Destination/Intermediate destination

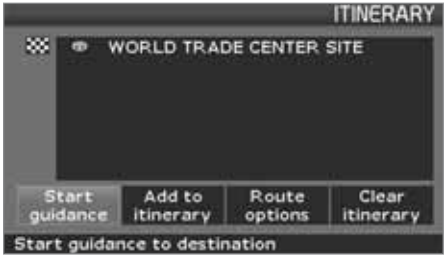
Itinerary

The menu selection **Itinerary** becomes accessible after a destination has been selected.

Make an itinerary with several stops to avoid selecting a number of destinations during a trip.

Up to six intermediate destinations and one final destination can be specified in an itinerary.

### Start guidance




Begin guidance to the destination.

### Add to itinerary

All additional destinations are added to the itinerary.

### Route options

Provides settings for selecting various types of roads, etc.

### Clear itinerary

Deletes the entire itinerary.

### Editing an itinerary

Itinerary

- Select a specified destination and press **ENTER** or > to access a sub-menu.

### Information

Provides information about the destination.

### Delete

Removes the destination from the itinerary.

### Move

Change the destination's position in the itinerary.

### Adjust

Select a new location on the map as a destination.

### Store

Save the destination, which will be accessible under **Itinerary**.

## Itinerary

### Removing destinations from an itinerary

Itinerary

Delete all destinations: All intermediate destinations and the final destination will be deleted.

- Go directly to **Clear itinerary** and press **ENTER**.

Delete intermediate destinations in an itinerary:

1. Select one of the specified intermediate destinations and press **ENTER** or > to access a sub-menu.
2. Go to **Delete** and press **ENTER**.

**NOTE**

Destinations that have been passed are automatically deleted from the itinerary.

### Saving destinations for a return trip

Up to 250 destinations can be stored for re-use in different itineraries.

An audible signal that alerts the driver that he/she is approaching a stored destination as well as additional information can be linked to a stored destination, see page 51 – "Add information about a stored location."

Itinerary

### Saving a destination from the itinerary

1. Go to the destination to be saved with the **navigation control** and press **ENTER** or > to access a sub-menu.
2. Select **Store** and press **ENTER**.
3. Use the **navigation control** to select the symbol to be displayed on the map and press **ENTER**.
4. Then use V to enter a name for the location.
5. Go to **Store** and press **ENTER**.

The current position can also be stored quickly, for example while driving, by simply pressing one button, see page 42.

### Save a position on the map

Map mode

1. In Map mode, use the **navigation control** to move the cursor to the point on the map to be saved and press **ENTER**.
2. Select **Store** in the Map scroll menu and press **ENTER**.
3. Use the **navigation control** to select the symbol to be displayed on the map and press **ENTER**.
4. Then use V to enter a name for the location and press **ENTER**.

## Next destination in the itinerary

Next destination

The map will show the next destination.

1. Press **ENTER** or > for information such as the name of the destination, or remaining travel time or distance from the current location to the destination.
2. Press **ENTER** again if other destinations have been specified for information and to see these destinations on the map.
3. Go to **Map** and press **ENTER** to see map information over the area.

## Current position

### Current position

Current position

The map shows the vehicle's current position.

- Press **ENTER** or > for information about this position, such as its name or coordinates.

#### GPS

Shows the number of satellites with which the system is in contact.

## Traffic information

Settings ➔ Traffic information

Regardless of whether the navigation system is in **Easy** or **Advanced** mode, broadcast traffic information is always received and presented. see page 66 for additional information.

**NOTE**

Please be aware that traffic information may not be available in all areas.

## Settings

### Route options

Settings ➔ Route options

- Use the **navigation control** to move among the options, select the desired settings and press **ENTER** to save the settings.
- Press **BACK** to undo a setting.

**Route**
Select Fast, short, or easy for the system to calculate a route.

– **Fast**: The system will prioritize major roads for the fastest permitted driving.

– **Short**: The system will prioritize as far as possible the shortest distance to the destination.

– **Easy**: The system will prioritize as far as possible roads that do not entail difficult driving situations or numerous intersections.

**Avoid highways**
Set the system to avoid highways/freeways when calculating a route.

**Avoid toll roads**
Set the system to avoid toll roads when calculating a route.

**Avoid ferries**
Set the system to avoid ferries when calculating a route.

**Avoid car train**
Set the system to exclude car trains when calculating a route.

**Avoid traffic problems**
Set the system to take traffic disruptions into consideration when calculating a route.

**Avoid time-restr. roads**
Set the system to avoid time-restricted roads when calculating a route.

**NOTE**

This function requires that the vehicle's clock be correctly set for the current time zone.

**Avoid specified areas**
This function is designed to help you avoid being guided to areas, cities or sections of cities that you prefer not to drive through. The system always excludes these areas when calculating a route.

1. Set the system to avoid specified areas when calculating a route and press >.
2. Select **Avoid specified areas** and press > again to specify an area.

### Reset to default

Return to the system's factory settings for route options.

- Press >, select **OK** and press **ENTER**.

**NOTE**

When the system calculates a route over longer distances, it is designed to select major roads (highways/freeways, etc.).

If you have set the system to avoid highways and toll roads, the system will avoid guiding you to these types of roads to as great an extent as possible, and will only use such roads when no other reasonable alternative is available.

## Map options

Select the way in which the map is displayed.

Settings ➔ Map options

- Move among the functions with the **navigation control** and press **ENTER** to save.

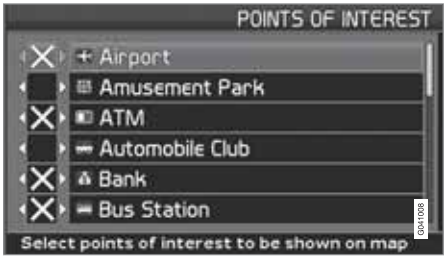
### POI selection

- Press > to access a sub-menu.

– Select **Show** to display all POI symbols on the map.

– Select **Hide** to show no POI symbols.

– Select **Show selected** and press > to select the symbols to be displayed on the map. The symbols selected to be displayed will be marked with an X.




- Select or unselect symbols with < or > and press **ENTER** to save.

### Map

Select **Show** or **Hide**. If the map is hidden, the system will use an arrow for guidance.

### Right map view

Choose to display the map in 2D (two dimensional - straight from above) or 3D (three-dimensional - angled from above).

- When **3D** is selected, the vehicle's direction is always toward the top of the screen.
- When **2D** is selected, choose whether **2D Heading** or **2D North** is to be at the top of the screen.

*Selecting elevation angle.*

Settings ➔ Map ➔ Map view ➔ 3D

After selecting **3D** with > or < and **ENTER**, the panel for selecting the elevation angle will be displayed. Select the desired angle with ∧ or ∨ followed by **ENTER** and **BACK**.

## Settings

**Left map view**
See the information in "Right map view."

**NOTE**

If 3D has been chosen for the right map, the left map can only be viewed in 2D.

**Compass**
Select the way in which the compass is displayed on the screen: **Icon**, **Text** or **Hide**.

**Current location**
Select whether or not the name of the street on which you are currently driving will be displayed at the bottom of the screen.

**Reset to default**
Return to the factory setting for all map options.

- Press >, select **OK** and press **ENTER**.

### Guiding options

Settings ➔ Guiding options

**Time/dist. to go**
Select **RTA**, **ETA** or **Hide**.

– **RTA**: (Remaining Time to Arrival) The time remaining from the current location to the destination.

– **ETA**: (Estimated Time of Arrival).

**NOTE**

The time set on the vehicle's clock affects the times calculated by the system.

**Charge area warning**
In addition to toll roads with gates or other types of barriers, there are also other restricted roads/areas with no physical barriers for which fees are charged.

Select **Yes/On** for a warning when approaching such areas or **No/Off** if no warning is desired.

**POI warning**
The driver is alerted by an audible signal when he/she is approaching a section of road where accidents are common or a speed camera.

- Select **Yes** to activate the audible signal feature or **No** if no signal is desired.

Marking sections of road where accidents are common and/or have speed cameras is determined by state/provincial/local legislation.

**NOTE**

- In certain areas, no speed limit is listed on the map when a warning is provided for a camera.
- Please keep in mind that the speed limit in certain areas may have changed and may not correspond to the speed limit shown on the map when a camera warning is provided.
- The driver is always responsible for adhering to current, applicable traffic regulations.

**Reset to default**
Return to the factory setting for all guiding options.

- Press >, select **OK** and press **ENTER**.

### System options

Settings ➔ System options

- Move among the functions with the **navigation control** and press **ENTER** to save settings.
- Press **BACK** to undo a setting.

**Guiding voice**
Select a **Male** or **Female** voice.

**Guiding volume**
Set the volume level **1-5** for the guiding voice or choose **Off**.

**Language**
Select the language to be used by the system.

**Menu color**
Select **Black**, **Chrome** or **Blue**.

**Map color**
Select **Bright 1**, **Bright 2** or **Dark** .

Light colors are intended for daylight use and dark colors are best suited for dark lighting conditions.

**Screen saver**
If the screen saver is set to **ON**, the screen will go blank after 30 seconds).

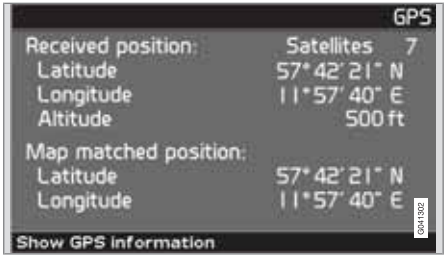
**Help**
**Hide** or **Show** context sensitive help texts at the bottom of the screen.

**Distance unit**
Choose between **miles** or **kilometers**.

**User mode**
Toggle between **Easy** and **Advanced** modes.

**Date & time info**
Set date and time information.

**GPS Information**




Shows coordinates and the altitude of the vehicle's current location, and displays the number of satellites with which the system has contact.

- Press >

**NOTE**

Information about altitude is shown in steps of 30 ft. All altitudes below 150 ft are shown as <150 ft.

**About**
Shows system and map information.

**Reset to default**
Return to the factory setting for all system options.

- Press >, select **OK** and press **ENTER**.

## System simulation

### Start the demo (system simulation)

Settings ➔ Start demo

When the vehicle is at a standstill, this function offers simulated guidance to the currently set destination. Settings can also be made during the demonstration.

- Use **Stop demo** in **Settings** to stop the simulation.

**NOTE**

The demonstration function can only be used if a destination has been selected.

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# 04

## TRAFFIC INFORMATION

## Introduction

### Reception and display

Broadcast traffic information is always received, regardless of whether the navigation system is in **Easy** or **Advanced** mode.

Settings for the way in which traffic information is presented can only be made in **Advanced** mode, see page 42.

The way in which traffic information is presented is also affected by the way in which it is broadcast.



**NOTE**

Traffic information is currently not available in all areas.

The area covered by the system is being steadily expanded.

### Traffic symbols on the map

*Symbol for traffic message.*

When at least one traffic message has been received for the programmed route, this will be indicated by a symbol in the upper left corner on the map. Use the navigation control to scroll to the message in order to see the location and type of problem indicated.

Disruptions in traffic are marked by symbols, lines, and boxes. These symbols are displayed in red or yellow.

Red – important information.

Yellow – General information.

| | |
|---|---|
| ☆☆ | Accident |
| ⇧⇧ | Slow-moving traffic |
| ⇕⇕ | Slow-moving traffic in both directions |
| ⇑⇑ | Traffic at a standstill |
| — — | Local traffic message |
| ● ○ | Other information |

### Extent

Certain traffic messages also contain information about the extent of the traffic disruption.

For all map scales up to five miles (5 km) the extent of the disruption is marked with a red or yellow line along the affected road. The length of the line indicates the extent (length) of the disruption.

## Before guidance begins

Settings ➔ Route options

When setting a new route, select whether or not the system should take traffic problems into account when the function **Start guidance** is activated, see page 53.

1. Select **Avoid traffic problems**.
2. Choose between **Yes** and **No**.

**Yes**
The system will avoid roads where there are traffic tie-ups to as great an extent as possible when a route is activated.

**No**
The system will not avoid roads where there are traffic disruptions.

**NOTE**

When the system has been started, it can take up to 15 minutes before all traffic information for the area has been downloaded.

## During your trip

Settings ➔ Traffic information ➔ Dynamic route guidance

The system will suggest a different route if there are better alternatives, for instance, if traffic information indicates a tie-up along the originally selected route.

**Man/Sem-aut/Auto/Off**
Select the way for the system to suggest an alternative route.

- **Manual**

An alternate route will be suggested, regardless of whether it is better or worse; select/accept the suggested route and a new route will be calculated.

- **Sem-auto**

An alternative route will only be suggested if it is better; select/accept the suggested route and a new route will be calculated.

- **Auto**

The system will calculate and use a new route automatically on the condition that it is better.

- **Off**

The system will not show or calculate an alternative route.

**Off**
The system will not search for a better route in the event of a traffic problem.

### Messages along the route

If **Man/sem-aut/** has been selected and a traffic disruption has occurred along the route, the following will be displayed.

If there is another route that will enable you to avoid the disruption, the difference in distance and driving time will be displayed on the screen:

**Changed traffic situation. Use new route?: 200ft longer, 00h 09m faster.**

- Select **Yes** or **No**.

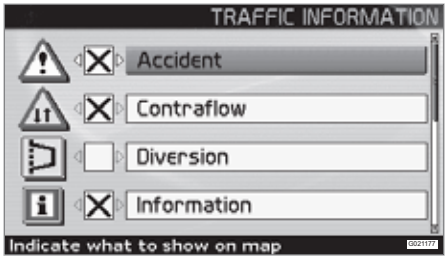
**Yes**
A new route will be used around the affected area.

## Avoiding traffic problems

**No**
The system will continue to guide you through the area affected by the traffic disruption.

**Show new route**
This displays a map showing the new route.

## Traffic information selections




Settings ➔ Traffic information ➔ Traffic-info. selection

Select the type of traffic information to be displayed and taken into consideration when the system calculates a route.

### Show all

All traffic information will be displayed.

### Hide all

No traffic information will be displayed.

### Show selected

1. Press > to select among the symbols.
2. Use ∧ or ∨ to select which traffic information symbols (traffic messages) that will be displayed on the map.
3. Activate/deactivate with > or <.
4. Confirm the settings with **ENTER**.

The scroll bar on the right side of the screen indicates that there are more options in the list than can be displayed at one time.

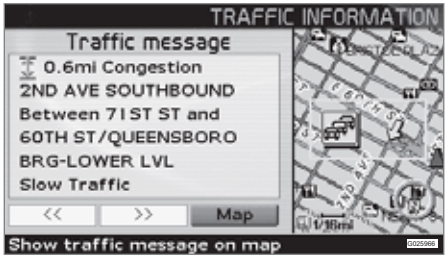
### Traffic signs on the map

| | |
|---|---|
| | Accident |
| | Contraflow (two-way traffic, single lanes in each direction) |
| | Diversion (Detour) |
| | Information |
| | Narrow road |
| P | Parking information |
| | Congestion |
| | Roadwork |
| | Slippery road |
| | Other hazard |

## Reading information

### Reading traffic messages

Read traffic msg.




*Detailed traffic information*

To read traffic messages on the screen:

1. Press **ENTER** in map mode for the Shortcut Menu:

2. Select the sub-menu Read traffic msg with < or > and press **ENTER**, see page 43.
   > A red or yellow frame indicates the current mesage.
3. Scroll forward or back with < or > and press **ENTER** for detailed traffic information (see the example in the illustration).
4. Press **BACK** to return to the current messages again.
   > The number of messages available for the map area is displayed on the screen.

Detailed information about the traffic disruption is also displayed. The extent of the disruption is shown at the top of the screen. If the traffic disruption is on the currently selected route, the distance to the disruption will be displayed.

The information provided will vary, for example, duration, limitations in speed, vehicle width and height, roads effected, etc., depending on the content of the message.

#### Scale

The current map scale determines the amount of traffic information that can be displayed; the larger the area shown on the map, the greater the amount of information that can be displayed.

### Station search/selecting a station for traffic information

Settings ➔ Traffic information ➔ Search/ select station

The system searches automatically for traffic information, but it is also possible to select a specific station.

#### Search station

- Press **ENTER** to search for existing stations.

#### Select station

1. Press **ENTER** to select among the existing stations.
2. Select a station by using ∧ or ∨ and press **ENTER**.
3. Press **BACK** to return to the previous screen.

#### Current station

Shows the station that is currently selected for traffic information.

#### Reset to default

Return to the default factory settings for stations.

- Press >, select OK and press **ENTER**.

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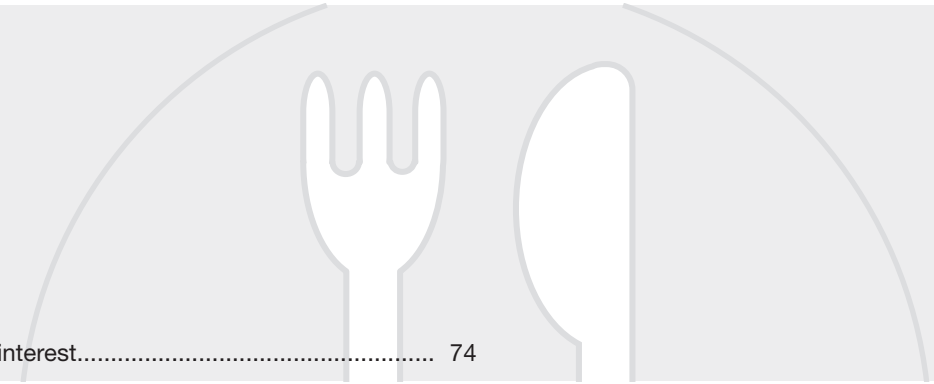

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# 05

## SYMBOLS ON THE MAP

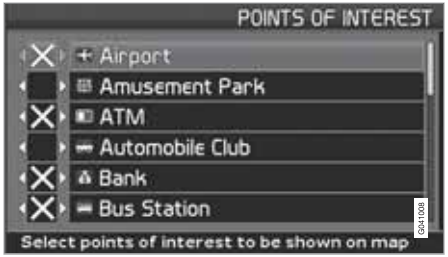
## Road numbers and Points of interest

### Road numbers

Local and interstate road numbers are shown on the map.

### Points Of Interest (POI)

Choose to show all or none of the points of interest or select the ones to be displayed.




Settings ➔ Map options ➔ POI selection ➔ Show selected

1. With **POI selection** marked, press ➔ – a menu will open.
2. Mark **Show selected** and press ➔ – a new menu will open.
3. Points of interest marked by an X will be displayed on the map – move forward in the list and remove the Xs with ➔ for the symbols that are not to be displayed.
4. Finish by pressing **ENTER** when all of the choices have been made – and navigate back out of the menu by pressing **BACK**.

**NOTE**

The symbol for a certain point of interest may vary from one state or province to another.

Select the points of interest to be shown on the map.

| | |
|---|---|
| | Airport |
| | Amusement park |
| | ATM |
| | Automobile club |
| | Bank |
| | Bus station |
| | Beach |
| | Bowling |
| | Car rental |
| | Casino |
| | City center |
| | City hall<br>Civic center<br>Community center<br>Court house |
| | Coffe shop |
| | Company |

## Road numbers and Points of interest

| | | | | | |
|---|---|---|---|---|---|
| | Commuter rail station | | Hamlet | | Park & ride |
| | Compressed natural gas | | Historical monument | | Parking garage |
| | Concert hall | | Hospital | | Parking |
| | Convention/exhibition center | | Hotel | | Pharmacy |
| | Doctor | | Ice skating | | Place of worship |
| | Dry cleaner | | Library | | Police station |
| | Embassy | | Liquid petroleum gas | | Post office |
| | Ferry terminal | | Lookout | | Public sport airport |
| | Fire brigade | | Major companies | | Recreation area/Park |
| | Gas station | | Marina | | Rest area |
| | Golf course | | Movie theater | | Restaurant |
| | Government office | | Museum | | School |
| | Grocery store | | Night life/Music club | | Shopping center |

## Road numbers and Points of interest

| | |
|---|---|
| | Ski resort |
| | Sports complex |
| | Stadium |
| | Swimming pool |
| | Theater/opera |
| | Toll booth[A] |
| | Tourist attraction |
| | Tourist information |
| | Train station |
| | University/college |
| | Volvo retailer |
| | Winery |
| | Zoo |

[A] Cannot be selected as a destination

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# 06

## QUESTIONS & ANSWERS

## Frequently asked questions

**The vehicle's position on the map is incorrect**
The Global Positioning System (GPS) indicates the car's position with an accuracy of about 65 feet (20 meter). Accuracy may be even less when driving on roads lying parallel to another road, winding roads, roads on several levels and also after driving a long distance without making any distinct turns. Tall buildings and mountains, tunnels, viaducts, over/underpasses etc also have a negative affect on the reception of GPS signals, which means that the estimation of the car's position may not be precise.

**VNS does not always calculate the fastest/shortest route.**
When calculating a route, distance, width of road, type of road, number of right or left turns, traffic circles etc., are all taken into account when calculating the best theoretical route. Experience and local knowledge may, however, lead to a better choice of route.

**The VNS system chooses toll roads, freeways, and ferries even though I have opted to avoid them.**
When calculating routes over longer distances, for technical reasons the system can only use major roads. If you select NO for toll roads, freeways, and ferries, they will be avoided as much as possible, but will be used if no other reasonable alternative is available.

**After being transported, the car's position on the map is incorrect.**
If the car is transported, for example by ferry or train, or in such a way as to impede the reception of GPS signals, it can take up to 5 minutes to calculate the car's new position correctly.

**The car's position on the map is incorrect after the car battery has been disconnected.**
If power has been cut from the GPS antenna, it can take more than 5 minutes for the GPS signals to be received correctly and the car's position to be calculated.

It may be necessary to drive ten to fifteen miles, and make a number of turns before for the system will function optimally.

**The car symbol on the map moves erratically after a tire change**
In addition to the GPS receiver, the vehicle's speedometer and an onboard gyro are also used to calculate the vehicle's current location and direction of travel. If the spare tire is put on the vehicle, or is a change is made from summer to winter tires (or vice versa), the navigation system must "learn" the new dimensions of the tire(s). Therefore, it may be necessary to drive for several miles, including a number of turns, for the system to make this adjustment.

**The map image does not correspond with actual conditions.**
Factors such as the constant expansion and rebuilding of the road network, new traffic regulations constantly being introduced etc., mean that the digital map database is not always complete. Maps information is periodically developed and updated. Additional information is available from your Volvo retailer.

**The map scale sometimes changes**
There is no detailed map information for certain areas. If this is the case, the system automatically changes the map scale.

**Certain menu options are not available**
Check the settings that you have made. Select **Reset to default** for the particular option to return to the default settings.

**The system indicates the route on which I am already driving when I have selected Start guidance or Detour**
The system cannot find a better alternative to the current route.

**The car symbol on screen jumps forward or spins.**
The system may need a few seconds to sense the position and movement of the car before

you drive off. Switch off the VNS system and the ignition. Switch on the ignition again and restart VNS, but remain at a standstill for a short time before driving off.

**I am planning a long trip but do not want to specify destinations in the cities that I will be passing through. What is the easiest way to set up an itinerary?**
Select the final destination directly on the map using the pointer. The system will automatically guide you to the final destination even if you drive past intermediate destinations.

**Why do I not receive all traffic messages?**
The function is not available, not fully developed, or is not available on all markets. Also, check that the correct settings have been made in **Route options**.

**The system's map information is not up-to-date**
Contact your Volvo retailer for updated map information.

**WARNING**

**Navigating safely**

Always use good judgment when following navigation system guidance, and do not follow guidance that seems contrary to your own best judgment.

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